

**CONGRESSMAN SHERWOOD BOEHLERT (R-NY)**  
**SPEECH TO BUSINESS-HIGHER EDUCATION FORUM**  
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It's a pleasure to be back with you again this year to discuss our shared commitment to strengthening U.S. competitiveness.

And I don't say that just to open up with some pleasantries. It truly is a pleasure because this year I have a much happier tale to tell than I did when I spoke here last June. But in the end my message will be the same: we all have a lot of work to do.

But I'm getting ahead of myself. Let me start with the good news, or perhaps I should say, the improving news.

Let me quote the heart of what I told you last June 23. I said (and I quote), "Let me start with a very clear and stark statement: National Science Foundation (NSF) funding, in general, and NSF education funding, in particular, are in trouble." (End quote.) I'm pleased to report that at least half that statement no longer appears to be true.

You'll notice the caveats in my good news, and I'll come back to that. But again, let's begin with the positive.

So here it is. The President's American Competitiveness Initiative both reflects, and has helped catalyze, a new-found commitment to basic research spending and science and math education in the Congress, and I think, in the country. We are in a very different place than we were a year ago.

What happened? Well, the news out of China and India, our domestic economic insecurities, Tom Friedman's book, *The World is Flat* and ensuing coverage elsewhere, and who knows what other factors put national economic competitiveness in the front of people's minds for the first time since the 1980s when we were rather obsessed with the perceived threat from Japan.

Because of all that, or as part of all that, American business became more vocal about competitiveness issues. And I can't stress enough how significant a change that has been. Sure, business, and academia, had long called for greater investment in research. But the call sounded rather perfunctory, and there were always higher items on business' agenda.

Research was sort of a "mid-list" issue, and when business lobbied Congress, folks rarely got to the items in the middle of the list. Boy, that's changed. I spoke yesterday to the members of AeA, the former American Electronics Association, as they were in town for a day of lobbying, and research and education were pretty much heading up their list. And the Democrat House leader Nancy Pelosi spoke to them about research, as well. That would have been hard to imagine a year ago.

The increasing priority of the competitiveness issue could also be seen in the strengthening stream of reports from groups like yours and the Council on Competitiveness and the Business Roundtable and AeA and others, culminating in the National Academy of Sciences' "Rising Above the Gathering Storm," which became something of a gathering storm itself and got unprecedented attention for that kind of report.

That report – thanks to good and rapid work, magnificent follow-up by the report panel's chairman, Norm Augustine, and very good timing – that report turned out to help set the agenda for the Administration and the Congress.

Some folks in Congress act now like the report was handed down on Sinai, which goes a little far for me. It's a perfect document to guide us, but it was a rapid, human effort, and its recommendations are just that, not edicts. But I digress.

So what happened next? Folks like me, and Congressman Vern Ehlers, and Congressman Frank Wolf, who heads the key Appropriations Subcommittee for science spending, went to the White House and made sure that folks like then-Budget Director Josh Bolten were taking the Augustine report seriously, and they were, although we still heard the concerns about federal spending.

And then we had our Competitiveness Conference last December that showed once again that this was a concern for business and that it was a good Republican issue.

And it all came together in January, when the President delivered his State of the Union Address, and laid out the American Competitiveness Initiative, calling for the doubling of the budget for NSF, the Department of Energy Office of Science, and the National Institute of Standards and Technology (NIST) over the next ten years.

And two weeks later that was followed by a budget proposal that included almost an 8 percent increase for NSF (compared to about a 2 percent request last year), a 15 percent increase for the Office of Science and a double-digit increase for NIST's laboratory programs.

Not Nirvana. Not every science agency did as well.

But it was a pretty spectacular shift that focused, as everyone had been calling for, on physical science research, and it put that issue on the front burner in Congress. The Initiative, or ACI, was less compelling, for me, on the education side. But it did acknowledge the call by the Academy and others for improving science and math education, and it included some Department of Education program expansions for that purpose. But I'll come back to that.

Just as remarkable as the President's shift is that the Congress appears to be following through. There hasn't been a lot of hoopla about that. In fact, I saw a story in The Wall Street Journal last week on the ACI where you had to read all the way to the bottom and ignore the tone to realize that Congress was taking action.

But here's what's happened so far. In the tightest budget year we've had yet – so tight Congress hasn't been able to agree on an overall budget blueprint – in this tight year, the House a couple of weeks ago passed an Energy appropriation that fully funded the proposed increase for the Office of Science.

The House will take up Frank Wolf's bill to fund NSF and NIST at the end of this month, and while the bill hasn't been marked up yet, it seems pretty certain that the ACI requests will be funded.

So ACI has cleared its first Congressional hurdles. There are plenty more to go – House floor action on Wolf's appropriation bill, Senate and conference, which may not even happen until after the election. But the outlook is one that I would not even have dreamed of last year. So I urge all of you to be active and vocal to make sure we make it to the finish line.

So that's the good news. Now let me turn to education, where the news is better than last year, but much more mixed than for research.

And when I talk about education here I'm referring to K-12 and undergraduate science, technology, engineering and mathematics (or STEM) education. We too often leave out the undergraduate piece where NSF is especially vital.

As the Nobel laureate Carl Wieman told our Committee last year, undergraduate education may be the keystone because it's where our teachers are trained.

Now all the reports I mentioned earlier, especially "Gathering Storm" quite rightly saw education as the most critical piece of ensuring our nation's future competitiveness. But the reports generally didn't call attention to the key education role of NSF and that was a missed opportunity.

As I mentioned here last year, NSF, while small, has a unique and crucial role in education because of its peer review process, its prestige, its history of laying the groundwork for change and its connections to higher education. And as I noted, in undergrad education, NSF is almost the only game in town.

But the appropriations outlook for NSF's education programs isn't much better than it was last year. The proposed increase of a couple of percentage points won't bring those programs back to their fiscal 2004 levels.

The Administration does not plan to have the Education Directorate share fully in the Foundation's expected growth and continues to shift emphasis to the Department of Education, which despite its current dynamic leadership, tends to be more bureaucratic, more political, more driven by distribution formulas, and which simply doesn't have the same focused education mission as NSF has had since 1950.

I am not hopeful that we will end up with good NSF education spending numbers this year despite a sympathetic ear from the appropriators. With all the other demands, the lack of Administration enthusiasm will be fatal.

So the primary task I want to put before you today is the same one as the one I gave you last year – you, especially the business leaders among you, need to convince the White House, NSF itself and the Congress that education can't be improved for free and that NSF has to play a greater role in those improvement efforts.

Now I've focused so far on appropriations because, as Willy Sutton famously said about banks, "that's where the money is." But I know there is a great deal of interest in what we're doing on the authorizing side – I'm sure Senator Bingaman talked to you about that and you've got information in your briefing books.

But not to sell our own Science Committee work short, but the most important action to focus on in this area is what the appropriators do. A lot of groups have been looking just at the authorization bills – PACE and the Commerce Committee bills in the Senate, and our Science Committee bills in the House.

We do want you to look at those bills, and we've sought and have been pleased to receive the endorsements of many groups, and we want yours. But in the end, unless we get the money from the appropriators, our legislation won't be worth a damn. So don't look just at the pretty pictures we paint in our authorizing bills, figure out how you're going to buy one.

Now let me reverse course a little and get you excited, nonetheless, about what we have been able to do. The fact that these innovation packages are appearing in both the House and the Senate, inspired again largely by the Academy report, is good news because it does reflect a growing sense of how important science and math education is.

And that will build momentum that should eventually pay off. Also, the particular programs in the bills can help shape the direction of federal education policy – shape it by emphasizing, I hope, getting more students to major in STEM fields, getting

more of the top majors in those fields to teach and training them better. Those should be the priorities, I think.

And I'm delighted to be able to report that yesterday, after a lot of work behind the scenes, our Science Committee unanimously reported out our two innovation bills – one focused on education, and the other on helping non-tenured faculty get research grants for potentially pathbreaking work.

For our education bill – which was introduced by a wonderful freshman Member, Dr. Joe Schwarz of Michigan – for our education bill, we decide we didn't want to create a laundry list of new programs that had no track record and little chance of being funded.

Instead, we focused on expanding and fine tuning existing programs that would accomplish the priorities I laid out a moment ago.

So, for example, we expand the Noyce Scholarship program at NSF, which provides funding to colleges and universities, which, in turn, provide scholarships to top math and science students who agree to teach two years in return for each year of aid. The schools also provide programs to help ensure that these kids will be prepared to teach.

In the bill, we fine tuned the program in a number of ways, including being clearer about the requirement to offer programming and not just scholarships, and we based some of those requirements on the successful UTEACH program at the University of Texas.

But the biggest problem is that this program has been hobbling along for several years with a budget in the range of \$4 - \$9 million.

We want to ramp it up to at least 10 times that so that we can approach the Academy report's goal of creating 10,000 new teachers a year.

I won't go through each provision of the bill, but this focused approach is reflected throughout, with careful expansions of NSF's math and science partnerships and key undergrad programs and some graduate programs as well. And we also require evaluation of the programs.

I think the outlook for passage of the package in the House is quite good. We have strong bipartisan support in a polarized time, we have strong business support, and Leadership is starting to get the importance of the competitiveness challenge. The bill could even come to the floor later this month, although I can't promise that yet.

I would never presume to speak for the Senate, but they've made unusually swift progress over there, reporting bills out of the Energy and Commerce committees.

Those bills will presumably be combined in some way and sent to the House later in the summer.

The conference will be difficult as the Senate took a much more expansive, less focused approach, creating lots of new, sometimes overlapping programs with lots of details. But I'm optimistic that we'll be able to narrow the focus and get a bill that the President can sign this winter.

That's very quick work by Washington standards, especially given that this wasn't even on the radar screen a year ago.

Meanwhile, there's one other education effort underway that you should be watching that may have escaped your notice.

In one tiny provision in last year's massive budget reconciliation bill, Congress – led by the Education committees – created an Academic Competitiveness Council, or

ACC, headed by the Secretary of Education and including every federal agency that has education programs, which includes virtually all of the science agencies – NSF, Energy, NASA, etc.

The idea was prompted by GAO report that found that there were hundreds of overlapping science and math education programs in the federal government.

Conservatives, in particular, are watching the ACC closely, hoping that it recommends the elimination of some programs, and the House passed a resolution yesterday saying, in effect, that we looked forward to the ACC's report, due this winter.

Now the ACC is a good idea in theory – we ought to be looking across the government to see what's working and what isn't and to make sure our programs are coordinated. But the ACC will turn out to be a bad thing if it over "rationalizes" the system and makes every program look like, or become subservient to Department of Education programs.

We need a diverse set of programs from different agencies, often programs working on the same problems – as long as that duplication is intentional and coordinated and the programs are being properly evaluated.

We had a hearing with the primary ACC members back in March, and it seems like the effort is off to a good start. But we'll all have to watch to ensure that the ACC recommendations lead to a strengthening and not merely a narrowing of federal science and math education efforts.

So, in short, having good news doesn't lessen the workload for any of us. We need all of you more than ever to be pushing vocally and aggressively for investments in research and education. We now have the best opportunity we've had in years to make progress.

Let's not blow it.

Thank you.